## **Abstract**

Imitation has always been a means of learning especially for young children. Recent researches discovered a phenomenon in children called overimitation and it is only distinctive to humans universally. Overimitation means that children would reproduce those obviously causally irrelevant actions. A question arises into investigating why did this seemed to be inefficient phenomenon occur. Past researches addressed this phenomenon differently, claiming overimitaion is adaptive for culture transmission and it is unavoidable, as the information would be automatically coded. It was observed that the puzzle box used in those overimitation studies might be too unfamiliar to the child, which may induce imitation. Therefore, in these 2 studies, the familiarity of the apparatus would be manipulated and tested on 115 children aged between 3 to 5. It was hypothesized that there the unfamiliar apparatus would generate higher overimitation rate than familiar apparatus. And the change of procedures in Study 2 would result in a higher score too. However, the familiarity of apparatus was not found to be a factor in affecting children's fidelity of imitation. Yet, how relevant the procedures to getting to the goal were even more critical. Selective imitation was found instead of high fidelity overimitation. Imitation is a manifestation of children's understanding and knowledge of the goal and intention rather than to the apparatus. No one single research could explain overimitation and selective imitation fully and further researches could focus on distinguishing the two and generate a comprehensive explanation.